

CLAIMS

1. A control system for controlling external systems coupled to a local area network, the control system comprising:

5 a control unit coupled to the local area network, the control unit comprising system control software operative to forward a tagged external system message that includes a control command to at least one external system and to receive a tagged external system message that includes status information back from the at least one external system upon query from the control unit; and

10 a first subscriber station in communication with the control unit, the first subscriber station operative to interface with the control unit using tagged subscriber station messages, the tagged subscriber station messages being applicable to a subscriber interface of the first subscriber station.

15 2. The system of claim 1, wherein the tagged subscriber station messages are HTML documents.

3. The system of claim 1, wherein the tagged subscriber station messages are XML messages.

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4. The system of claim 1, wherein the tagged external system messages are XML messages.

5. The system of claim 1, wherein the control unit further comprises:

25 control unit aggregation means for aggregating control data that facilitates control of at least two external systems, the control data capable of being concurrently displayed on a common screen by the subscriber interface of the first subscriber station.

6. The system of claim 5, wherein the control unit further comprises:
means for identifying a subscriber device associated with the first subscriber station;
means for identifying external systems that are subscriber controllable systems
5 based at least in part on the subscriber device associated with the first subscriber station;
means for providing display content to the first subscriber station, the display content including menu content for a set of the subscriber controllable systems; and
means for providing display layout control data to the first subscriber station, the display layout control data being applicable to the subscriber interface of the first
10 subscriber station.

7. The system of claim 1, wherein the system further comprises:
a second subscriber station in communication with the control unit, the second subscriber station operative to interface with the control unit using tagged subscriber
15 station messages, the tagged subscriber station messages being applicable to a subscriber interface of the second subscriber station.

8. The system of claim 1, wherein the control unit further comprises:
an aggregation module operative to aggregate control data that facilitates control
20 of at least two external systems, the control data capable of being concurrently displayed on a common screen by the subscriber interface of the first subscriber station.

9. The system of claim 8, wherein the control unit further comprises:
a subscriber device identification module operative to identify a subscriber device
25 associated with the first subscriber station;
a subscriber controllable external systems identification module coupled to the subscriber device identification module and operative to identify external systems that

are subscriber controllable systems based at least in part on the subscriber device associated with the first subscriber station;

5 a content module coupled to the subscriber controllable external systems identification module and operative to provide display content to the first subscriber station, the display content including menu content for a set of the subscriber controllable systems; and

10 a layout module coupled to the subscriber device identification module and operative to provide display layout control data to the first subscriber station, the display layout control data being applicable to the subscriber interface of the first subscriber station.

10. A control unit for facilitating the control of external systems, the control unit and the external systems being coupled to a local area network, the control unit comprising:

15 system control software operative to interface with a first subscriber station using tagged subscriber station messages, the first subscriber station in communication with the control unit through a network, the tagged subscriber station messages being applicable to a subscriber interface of the first subscriber station, the system control software operative to forward a tagged external system message that includes a control command
20 to at least one external system and to receive a tagged external system message that includes status information back from the at least one external system.

11. The control unit of claim 10, wherein the tagged subscriber station messages are HTML documents.

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12. The control unit of claim 10, wherein the tagged subscriber station messages are XML messages.

13. The control unit of claim 10, wherein the tagged external system messages are XML messages.

14. The control unit of claim 10, wherein the control unit further comprises:
5 control unit aggregation means for aggregating control data that facilitates control of at least two external systems, the control data capable of being concurrently displayed on a common screen by the subscriber interface of the first subscriber station.

15. The control unit of claim 14, wherein the control unit further comprises:
10 means for identifying a subscriber device associated with the first subscriber station;
means for identifying external systems that are subscriber controllable systems based at least in part on the subscriber device associated with the first subscriber station;
means for providing display content to the first subscriber station, the display
15 content including menu content for a set of the subscriber controllable systems; and
means for providing display layout control data to the first subscriber station, the display layout control data being applicable to the subscriber interface of the first subscriber station.

20 16. The system of claim 10, wherein the control unit further comprises:
an aggregation module operative to aggregate control data that facilitates control of at least two external systems, the control data capable of being concurrently displayed on a common screen by the subscriber interface of the first subscriber station.

25 17. The system of claim 16, wherein the control unit further comprises:
a subscriber device identification module operative to identify a subscriber device associated with the first subscriber station;

a subscriber controllable external systems identification module coupled to the subscriber device identification module and operative to identify external systems that are subscriber controllable systems based at least in part on the subscriber device associated with the first subscriber station;

5 a content module coupled to the subscriber controllable external systems identification module and operative to provide display content to the first subscriber station, the display content including menu content for a set of the subscriber controllable systems; and

10 a layout module coupled to the subscriber device identification module and operative to provide display layout control data to the first subscriber station, the display layout control data being applicable to the subscriber interface of the first subscriber station.

18. In a control unit coupled to a local area network, a method for controlling
15 external systems coupled to the local area network, the method comprising:

receiving a first signal from a first subscriber station;

responsive to the first signal, forwarding a tagged subscriber station message to the first subscriber station, the tagged subscriber station message being applicable to the subscriber interface of the first subscriber station;

20 receiving a second signal from the first subscriber station based at least in part on the tagged subscriber station message; and

forwarding a tagged external system message that includes a control command to at least one external system based at least in part on the second signal from the first subscriber station.

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19. The method of claim 18, wherein the method further comprises:

after forwarding a tagged external system message to the at least one external system, receiving a tagged external system message that includes status information back from the at least one external system.

5 20. The method of claim 19, wherein the method further comprises:
responsive to the tagged external system message that includes status
information, forwarding a second tagged subscriber station message to the first
subscriber station, the second tagged subscriber station message including the status
information.

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 21. The method of claim 19, wherein the tagged external system messages are
XML messages.

 22. The method of claim 18, wherein the tagged subscriber station messages
15 are HTML documents.

 23. The method of claim 18, wherein the tagged subscriber station messages
are XML messages.

20 24. The method of claim 18, wherein receiving a first signal comprises:
based at least in part on the first signal, determining if the first subscriber station
is associated with a subscriber with control access to the at least one external system; and
if the first subscriber station is associated with a subscriber with control access,
forwarding a tagged subscriber station message to the first subscriber station, the tagged
25 subscriber station message being applicable to the subscriber interface of the first
subscriber station;

else, forwarding an access-denied signal to the first subscriber station indicating
that the first subscriber station is not associated with a subscriber with control access.

25. The method of claim 24, wherein determining if the first subscriber station is associated with a subscriber with control access comprises:

5 determining a subscriber identification associated with a subscriber using the first subscriber station; and
based on the subscriber identification, determining whether the subscriber has control access.

26. The method of claim 18, wherein the method further comprises:
10 identifying a subscriber device associated with the first subscriber station;
identifying external systems that are subscriber controllable systems based at least in part on the subscriber device associated with the first subscriber station;
providing display content to the first subscriber station, the display content including menu content for a set of the subscriber controllable systems; and
15 providing display layout control data to the first subscriber station, the display layout control data being applicable to the subscriber interface of the first subscriber station.